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NOTICE OF ALLOWANCE AND FEE(S) DUE

38107

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05/30/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS 595 MINER ROAD CLEVELAND, OH 44143 EXAMINER

WHITTINGTON, KENNETH

ART UNIT PAPER NUMBER

2862

DATE MAILED: 05/30/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,771	06/23/2006	Joern Borgert	PHDE030125US	7741

TITLE OF INVENTION: MULTISCALE LOCALIZATION PROCEDURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/02/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 38107 7590 05/30/2008 Certificate of Mailing or Transmission PHILIPS INTELLECTUAL PROPERTY & STANDARDS I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 595 MINER ROAD CLEVELAND, OH 44143 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/553,771 06/23/2006 Joern Borgert PHDE030125US 7741 TITLE OF INVENTION: MULTISCALE LOCALIZATION PROCEDURE APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1440 \$300 \$0 \$1740 09/02/2008 **EXAMINER** ART UNIT CLASS-SUBCLASS WHITTINGTON, KENNETH 2862 324-207150 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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			ART UNIT	PAPER NUMBER
CLEVELAND, OF	1 44143		2862	
		DATE MAILED: 05/30/2008		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 67 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 67 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
	10/552 774	BODGEDT ET AL
Notice of Allowability	10/553,771 Examiner	BORGERT ET AL. Art Unit
•		
	KENNETH J. WHITTINGTON	2862
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject to	plication. If not included n will be mailed in due course. THIS
1. X This communication is responsive to the After Final Amend	lment filed on May 13, 2008 and the	e inteviews May 22, 23, 2008.
2. ☑ The allowed claim(s) is/are <u>1-9 and 11-18</u> .		
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 		
2. Certified copies of the priority documents have	been received in Application No	
3. Copies of the certified copies of the priority doc	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	IENT of this application.	
 A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	et be submitted.	
(a) I including changes required by the Notice of Draftspers	on's Patent Drawing Review(PTO	-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the	Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
 DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT 		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal I	Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail Da 7. ⊠ Examiner's Amend	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Statem	ent of Reasons for Allowance
ŭ	9.	
	/Patrick Assouad/ SPE	

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in interviews with Douglas B. McKnight (Reg. 50447) on May 22 and 23, 2008.

Claims 1, 5, 9, 13 and 14 of the application have been amended as follows:

- 1. A tracking method for tracking a sensor in a capture range in a field generated by a field generator, the method comprising the steps of:
- (a) generating a field by means of the field generator for defining the capture range;
- (b) identifying a region of interest including the sensor within the capture range <u>based on a signal from the sensor;</u>

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(c) adjusting at least one of size, direction and orientation of the capture range to a level where the sensor is located with an iteratively improved accuracy and resolution until a preselected accuracy and resolution are achieved;

[(c)] (d) narrowing, focusing and centering the capture range by narrowing the field by means of the field generator;

 $\left[\frac{\text{(d)}}{\text{(d)}}\right]$ iteratively repeating steps (a) to $\left[\frac{\text{(c)}}{\text{(d)}}\right]$

5. A tracking system for tracking a sensor in a capture range in a field generated by a field generator, wherein:

the field generator iteratively adjusts at least one of a size, direction and orientation of the capture range to a level where the sensor is located with an iteratively improved accuracy and resolution until a preselected accuracy and resolution are achieved; and

the field generator focuses, narrows, and centers the capture range to be focused on a region of interest \underline{based} on a signal from the sensor.

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- 9. A computer program product comprising computer program code means to perform the following steps when the computer program is executed on a computerized tracking system:
- (a) generating a field by means of the field generator for defining the capture range;
- (b) identifying a region of interest including the sensor within the capture range $\underline{\text{based on a signal from the}}$ sensor;
- (c) narrowing and focusing the capture range by narrowing the field by means of the field generator to the region of interest and improving a resolution with which a location of the region of interest can be resolved;
- (d) iteratively repeating steps (a) to (c) until the location of the region of interest is resolved with a selected resolution.
- 13. The method of claim 1, further including the step of determining between steps $[\frac{(c)}{(d)}]$ and $[\frac{(d)}{(d)}]$ whether the accuracy and resolution provided within the capture range meets a preselected threshold.

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14. The method of claim 1, wherein step [(c)] (d) further includes improving a resolution with which the region of interest is identified as the capture ratio is narrowed.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Regarding claims 1-4, 11, 13 and 14, the prior art does not show or teach generating a field with a field generator, identifying the region of interest having the sensor therein based on the sensor signal and narrowing, focusing and centering the capture range by narrowing the field as recited in the claims and in combination with the other features of the claims.

Regarding claims 5-9 and 15-18, the prior art does not show or teach tracking a sensor in a capture range in a field generated by a field generator wherein the field generator focuses, narrows and centers the capture range in the field to be focused on a region of interest based on a signal from the sensor as recited in the claims and in combination with the other features of the claims.

Regarding claim 12, the prior art does not show or teach narrowing the capture range in a field generated by a

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field generator by means of a magnetic field generator including two coils mounted for rotation relative to a corresponding spaced axis and actuators to rotate each coil as recited in the claim and in combination with the of the features of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH J. WHITTINGTON whose telephone number is (571)272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth J Whittington/ Examiner, Art Unit 2862

/Patrick J Assouad/ Supervisory Patent Examiner, Art Unit 2862